

Title (en)
Laser welding process for coated metal sheets

Title (de)
Laserschweisverfahren für beschichtete Stahlbleche

Title (fr)
Procédé de soudure au laser pour des tôles revêtues

Publication
EP 0771605 B1 20051116 (DE)

Application
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Priority
DE 19541206 A 19951104

Abstract (en)
[origin: EP0771605A2] The method involves joining, by means of a laser weld seam, of two steel sheets (1, 2) of which at least one is provided with a coating with a low melting point. Before welding, the sheets in the joint region are oriented to one another at an acute angle (α) and that the weld seam is shaped as a fillet weld. Also claimed is a sheet-metal component made up of least two deep-drawn sheets joined by the proposed method.

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IPC 8 full level
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Cited by
US11358238B2; DE102016205349A1; WO2017167466A1; WO2022200301A1; DE19932415C1; DE10237796B3; EP1950002A3; FR2939342A1; DE102014216225A1; DE102006028441A1; EP1005944A3; DE102006014707A1; DE102017202671A1; DE102008033113A1; DE10061309B4; EP1084787A3; DE10053789B4; DE102005040200A1; DE10053789A1; DE10261507A1; DE10031377A1; DE10031377B4; DE10261507B4; EP1950002A2; US9533713B2; WO2010066974A1; US6568744B2; US6754945B2; WO2018149556A1; EP1757399A1; WO02096702A1; WO2019110585A1; WO2004014597A1; WO2018172254A1; DE102021107058A1

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